

WHAT IS CLAIMED IS:

1. An image pickup system comprising:

MOS sensors arranged in an image pickup region of a semiconductor substrate in the form of a matrix and having photoelectric transfer layers;

a peripheral circuit part formed in a region of said semiconductor substrate except for said image pickup region and having a driving circuit for driving said MOS sensors and a signal processing circuit for processing output signals from said MOS sensors; and

microlenses, formed on said photoelectric transfer layers via a first insulating film, for condensing picture signals on said photoelectric transfer layers,

wherein said driving circuit and said signal processing circuit in said peripheral circuit part are covered by a second insulating film, and the distance between the surface of said first insulating film and said semiconductor substrate is shorter than the distance between the surface of said second insulating film and said semiconductor substrate.

2. An image pickup system as set forth in claim 1, wherein said peripheral circuit part has at least first through third wiring layers which are stacked via an insulating film to form a multi layer metallization structure.

3. An image pickup system as set forth in claim 2, wherein a shading layer is formed in said image pickup region so as to be the same layer as said second wiring layer.

4. An image pickup system as set forth in claim 3, wherein said shading layer has a smaller thickness than that of said second wiring layer.

5. An image pickup system as set forth in claim 1, wherein the distance between each of said microlenses and a corresponding one of said photoelectric transfer layers is substantially equal to the focal length of the corresponding

one of said microlenses.